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ABSTRACT

This paper presents an alternative means of assessing faculty teaching that can be used by administrators. This method has been derived from in-depth faculty and student interviews, and its criterion of quality has been validated with empirical data through computer sensitivity analysis. The assessment process has been successfully tested in clinical teaching trials. Interviews with faculty have identified that their implicit expectations for professional development can be described in terms of technical skills, professional competence, and professional attitudes. In practice, lecturers explain these three skill areas to their students and describe how students will be taught and assessed. Students are asked to rate the lecturer on these three areas, and then the lecturer rates himself or herself. The indicator of effective teaching, that the students and the lecturer are working toward the same changes, is measured by the change expected from the students subtracted from the change expected by the lecturer. A "zero" is the score that indicates perfect alignment. This method promotes a positive teaching and learning culture by encouraging teaching and learning that promotes students' critical and evaluative thinking. (Contains 31 references.) (SLD)

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A Method of Assessing Quality Teaching to Create a Positive Institutional Teaching and Learning Culture

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Introduction

Postsecondary institutions assess quality teaching by (i) student feedback 'opinionnaires' and (ii) students' examination results. Ironically, these forms of assessment can reduce the quality of teaching to an inequitable popularity contest of 'easy courses' leading to 'grade inflation' and 'teaching-to-the-test'. The high stakes attached to assessing quality teaching, for institutional league tables and for professional promotion, makes these chosen forms of assessment highly influential in adversely shaping an institution's culture of teaching and learning.

This paper presents an alternative means of assessing Faculty teaching that can be used by administrators. It is designed to promote an alternative positive teaching and learning culture within the institution. This alternative method of assessment was derived from in-depth faculty and student interviews. Its criterion of quality has been validated on empirical data by computer sensitivity analysis and the assessment process successfully tested in clinical teaching trials.

This assessment method explicitly promotes students' understanding and professional attitudes, as well as their traditional skills, by operationally defining the assessment of skills, understanding and attitudes. It respects professional freedom and the inherent culture of each subject area by giving each lecturer the responsibility of promoting the culture of their subject through their teaching and assessment of its skills, understandings and attitudes. It allows faculty to adjust their in-course teaching and assessment schemes to the changing needs of the student body and minority students in their classes. The method results in a single administrative decision-point number that is a measure of quality teaching as it applies to (i) a particular individual, or (ii) a minority group or (iii) the whole class.

Many organisational factors and resources affect the teaching and learning culture of an educational institution. This paper focuses on the use of assessing quality teaching as a means of developing a positive teaching and learning institutional culture. There is a business maxim that states "what gets measured gets done and what gets rewarded gets repeated" (Friend, 1972). In educational institutions what gets rewarded is (i) the assessment of faculty teaching and (ii) the assessment of student learning. It is how the assessment of teaching is done and how the assessment of learning is done that has a great influence on the learning and teaching culture of the institution (Beichner, 1994; Hake, 1998; Halloun & Hestenes, 1985; Halloun, Hake, Mosca, & Hestenes, 1997; Hestenes, Wells, & Swackhamer 1992; Hestenes & Wells, 1992; Sokoloff & Thornton, 1997). These three aspects (i) teaching (ii) learning and (iii) the assessment of both, are so inter-related that they should be considered together.

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Unfortunately traditional forms of assessment lack integration and problems caused by these traditional forms of assessment negatively influence the learning and teaching culture of institutions. The common traditional assessment of faculty teaching is via the use of student opinionnaires. For example, Seldin (1984) found that administrators utilized student opinionnaires in two-thirds of 616 institutions surveyed. Student opinionnaires have been criticised as popularity contests, where staff reduce the standards of their courses and lead students to expect high grades in order to 'win their vote' (Greenwald, 1997; Greenwald & Gillmore, 1997; Howard & Maxwell, 1982; Marsh & Dunkin, 1997; Marsh & Roche, 1997, 1998). Faculty are expected to change their teaching in view of this anonymous feedback (Moses, 1996). Often these opinionnaires are anonymous because students fear retribution for 'failing' their teachers or might be thought to be soliciting favourable grades for favourable assessments of their teachers. Faculty feel uncomfortable in this one-sided contest where they can be anonymously failed yet have little influence over the selection of students they must teach. Some faculty feel that having to change their course emphasis in order to please naive students is an infringement of their professional freedom to teach how they believe, in their best professional judgement, their subject should be taught. This has been contributing to a negative culture of low standards, demotivated professionalism and mutual distrust for some years (Arreola, 1983; Cashin, 1983; Cherry, Grant, & Kalinos, 1988). For example, "What is called development, growth, and self-improvement today becomes the means by which decisions for institutional personnel management purposes are made tomorrow. Faculties become wary and suspicious of this double message involved in the evaluation system" (Mark, 1982, p. 168).

The traditional assessment of student learning is via examinations and coursework assignments of various kinds. Here the one-sided game is against the student who has little educational recourse and so can only resort to complaint about the course and the faculty - even to the extent of litigation. To protect themselves from the 'court case student' faculty favour objective assessment that does not expose their professional judgements about the students' work. Such objective assessments tend to emphasise Bloom's lowest cognitive level of rote learning. For example, "McKeachie (1987) has recently reminded educational researchers and practitioners that the achievement tests assessing student learning in the sorts of studies reviewed here typically measure lower-level educational objectives such as memory of facts and definitions rather than higher-level outcomes such as critical thinking and problem-solving that are usually taken as important in higher education." Feldman (1989). Adult students in professional subjects rightly devalue courses that emphasise only rote learning, to the extent that they are prepared to cheat in order to maximise their meaningless marks. Problem attendance is a feature of such courses - students get the lecture notes from those who do attend. Students learn to unquestionable do as they are told, not to criticise the views of faculty and to parrot what they believe Faculty expects them to regurgitate in examinations. Such is the negative effect traditional assessments of teaching and learning have on the teaching and learning culture of the institution. Research has indicated that these problems are in part due to misunderstanding of mutual expectations (Bastick, 1995). Faculty lack clarity in explicitly stating their expectations and relating these to their teaching and assessment of the students. The students misunderstand what is expected of them and are confused.

What is a positive teaching and learning institutional culture? The literature indicates that is one that encourages staff and students to be independent critical thinkers developing the attitudes and values of their profession. One where students and faculty value and enjoy the work they are doing. One where faculty and students respectfully work together based on a foundation of mutual trust. If an alternative method of assessment is to promote these changes, then first, that method must accommodate the wide institutional variations in assessment preferences and aim to improve teaching and learning by allowing

those lecturers who use it to appreciate more fitting teaching styles and enable them to allow their students to adopt more fitting styles of learning. Secondly, an alternative method of assessing teaching and learning must resolve the misunderstandings and confusions about mutual expectations in order to avoid the problems that lead to a negative teaching and learning culture. Thirdly, an alternative method must promote a positive teaching and learning culture by (i) ensuring students and faculty understand each other's expectations and (ii) by ensuring that students and faculty are both working towards the same expectations (Abrami, d'Apollonia, & Cohen, 1990; Abrami, 1989; Bastick, 1995; Bortz, 1984; L'Hommedieu, Menges, & Brinko, 1990; Miller, 1986; Scriven, 1994, 1995).

It is important to separate attainment and enjoyment so that student evaluations of course enjoyment are not misused as assessments of academic attainment (Hake, in press). Hence, the separate criteria of effective teaching used by this alternate method of assessment are to maximise (i) the academic attainment of the students and (ii) the students' and the lecturer's enjoyment of the course. The measurable indicator of effective teaching used is that the students and the lecturer are working towards the same expectations. The construct validity that the measurable indicator assesses the criteria is $p<0.01$ for both (i) and (ii) (Bastick, 1995)

Interviews with faculty on professional courses have indicated that their implicit expectations can be described in terms of three abilities (i) technical skills - rote learning, assessed by the accuracy of reproduction (ii) professional competence - appropriate transfer of skills to a novel situation, assessed by the justification of appropriateness and (iii) professional attitudes - the integration of one's life and work by one's values and beliefs, assessed by demonstration (Bastick, 1995). Faculty can be assisted in making these expectations explicit and in designing coursework and examinations that offer opportunities for assessing these three abilities. This professional development can be expected to improve the quality of their teaching (Askew, Brown, Rhodes, Wiliam, & Johnson, 1997). It is their professional prerogative to decide, and justify to their peers and their students, the emphasis they judge should be given to each of the three abilities on their courses. These judgements will depend on the subject, its level and the professional inclination of the lecturer. For example, lecturers on B.Ed courses expect an emphasis on technical skills in the first year, moving to an emphasis on professional competence in the second year and a greater emphasis on professional attitudes in the third year.

In practice lecturers explain to their students the three abilities and how they will be taught and assessed. When they wish to monitor the effectiveness of their teaching they ask the students to rate how they see the current emphasis of these three abilities and to rate how they would prefer the emphasis to be. The lecturer makes the same rating of the course. The indicator of effective teaching, that the students and the lecturer are working towards the same changes, is measured by the change expected by the students subtracted from the change expected by the lecturer. Zero is the perfect score on the total of the three abilities, and indicates perfect alignment.

The alignment score can be calculated for individual students, minority groups or for special comparisons e.g. is the teaching more effective for males than for females.

The method promotes a positive teaching and learning culture indirectly by encouraging forms of teaching and learning that faculty and students use to increase their valued assessment results. Namely, this method encourages teaching that promotes students' critical and evaluative thinking, high standards in technical skills and professional values. The assessment method promotes a positive teaching and learning culture directly through student and faculty assessment processes, as follows:

1. The institution promotes academic freedom and professional responsibility by confirming the lecturers' professional prerogative to decide, and justify to their peers and their students, the emphasis they judge should be given to each of the three abilities on their courses. This is reinforced by recognising an assessment process that lecturers control.

2. The institution promotes professional development by assisting faculty in making their professional expectations explicit in terms of the three abilities in their subject area and in assisting them to design coursework and examinations that offer opportunities for assessing these three abilities in their subjects.

3. Faculty encourage students' critical and evaluative thinking, to the extent they can justify as desirable, by not assessing the correctness of professional competence, but by assessing the students' justifications of why their applications are appropriate.

4. Faculty explicitly encourage professional attitudes, to the extent they can justify as desirable, by assessing demonstrations of professional attitudes on course assignments.

Generally, the development of technical skills is already well served by traditional methods of assessment. However, an interesting staff development programme would be to share methods of teaching professional competence and professional values.

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